

- 1 -

DESCRIPTION

PROCESS FOR PRODUCING OPTICALLY ACTIVE 3-HYDROXYPROPIONIC ESTER DERIVATIVE

Technical Field

The present invention relates to a process for producing an optically active 3-hydroxypropionic ester derivative useful as an intermediate for a medicament, in particular, an optically active 2-(hydroxymethyl)-3-phenylpropionic ester derivative.

More particularly, the present invention relates to a process for producing an optically active 3-hydroxypropionic ester derivative, in particular, an optically active 2-(hydroxymethyl)-3-phenylpropionic ester derivative, the process which is characterized by comprising synthesizing a 2-formylacetic ester derivative by using an acetic ester derivative available at low cost, a formic ester and a base, and stereoselectively reducing the 2-formylacetic ester derivative by use of an enzymatic source capable of stereoselectively reducing the formyl group thereof.

Background Art

Conventionally, the following processes are known for producing an optically active 3-hydroxypropionic ester derivative.

- 1) A process for obtaining an optically active 2-substitued-3-hydroxypropionic acid by asymmetrically